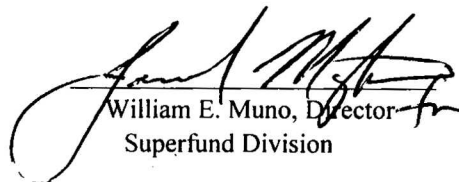


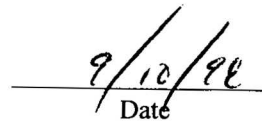
Five Year Review Report

**Velsicol Chemical Corporation
Clark County, Marshall, IL**

Pursuant to CERCLA

Prepared by:
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Region 5
Chicago, Illinois


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Date

I. INTRODUCTION

A. Authority and Purpose

The Illinois Environmental Protection Agency (IEPA) conducted this statutory five-year review under Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of the statutory five-year review is to evaluate whether a completed remedial action remains protective of human health and the environment at sites where hazardous waste remains on-site at levels that do not allow for unlimited use and unrestricted exposure. The Type Ia review conducted for this site is applicable to a site at which response is complete, but monitoring activities are ongoing. This review will be placed in the Site files and local repository for the Velsicol Chemical Corporation Superfund Site (the "Site") in Clark County, Marshall, Illinois.

B. Site History

The former Velsicol Chemical Corporation manufacturing facility is located in east-central Illinois, approximately one mile north of the City of Marshall, Clark County, Illinois, along State Highway Route 1. Interstate Highway 70 is approximately 0.6 miles north of the plant. Velsicol's property occupies an area of approximately 420 acres, of which 86 acres were utilized as a chemical production facility and on-site ponds. The Site has been operating as a chemical production facility since the 1930s. Velsicol produced various chemicals such as petroleum derivatives, resins, solvents, rubber extenders and technical grade Chlordane. Soils, sediments, surface water and groundwater were found to be adversely impacted on and off the Site from the facility.

The U.S. EPA placed the Site on the National Priorities List (NPL) on September 8, 1983 (48 FR 40658). The Illinois Environmental Protection Agency (IEPA) conducted the remedial investigation and feasibility study (RI/FS) for the Site from 1983 - 1988. The RI/FS concluded that soils, groundwater and surface water in the immediate area had been impacted by the facility. The Consent Decree for remedial design/remedial action (RD/RA) was signed by the potentially responsible party on December 29, 1988, the State of Illinois on January 23, 1989 and U.S.EPA on March 6, 1989. It became effective on September 15, 1989 upon being entered into Federal Court. Detailed remedial design plans were completed between September 1989 and November 1993. The remedial action activities began with contractor mobilization on July 1, 1991. The RA includes a long-term remedial action (LTRA) for groundwater. The groundwater collection system is projected to complete capture across the Facility in the year 2005. The RA for soil remediation was completed on May 5, 1995. The final remedy selected included excavation and stabilization of contaminated soils and placement in 5/6 Pond, capping 5/6 Pond to reduce infiltration, control erosion, and reduce gas emissions; relocation of the unnamed tributary; restricted use of on-site groundwater and soils through institutional controls; continued operation and maintenance of the groundwater collection system; modification to the groundwater monitoring program, which included installation of new wells, as well as closure of monitoring wells; continued long-term monitoring of the unnamed tributary; as well as long-term operation and maintenance of the landfill cap and its associated components.

II. DISCUSSION

A. Remedial Objectives

The final remedial action objectives of the ROD were to excavate and stabilize contaminated soils into 5/6 Pond, backfill excavated areas with common fill, cap 5/6 Pond, actively treat groundwater, closure of two waste disposal deep wells, realign the unnamed tributary. The final RA includes:

- Excavation, stabilization and consolidation of contaminated material in 5/6 Pond;
- the installation of the landfill cap to reduce infiltration, reduce surface gas emissions, and control erosion;
- backfill excavated areas with common fill;
- the implementation of institutional controls to restrict on-site groundwater usage;
- the continued operation of the groundwater collection system;
- the installation of additional groundwater monitoring wells and closure of specified wells;
- the closure of waste disposal deep wells No. 1 and No. 2;
- the monitoring of the groundwater and the unnamed tributary with long-term action levels established to reopen the ROD, if necessary; and
- the long-term operation and maintenance of the landfill cap, monitoring well network, groundwater collection system, and fence.

B. REMEDIATION ACTIONS

A legal survey was completed for the Velsicol property. Closure of waste disposal well No. 1 and well No. 2 was completed January 1990 and February 1994, respectively. Annual mechanical integrity testing of deep disposal well No. 2 was conducted and continued until deep disposal well No. 2 ceased operation and was closed. Sediments in the unnamed tributary between the Facility and Velsicol's western property boundary and sediments in the off-site unnamed tributary were excavated from Velsicol's western property boundary downstream approximately 2,000 feet. PRP's have decommissioned the Facility and consolidated, stabilized and capped all excavated material, approximately 90,000 cu/yds from the Facility, the unnamed tributary, 2 Pond, 4 Pond into 5/6 Pond. Approximately 150,000 cu/yds of common fill and clays were utilized to restore the excavated areas.

PRP's constructed a collection drain east of the 5/6 Pond in July 1991. Groundwater is being collected by the collection basin, treated on-site through an air stripper and a dual carbon treatment system, monitored to ensure compliance with cleanup objectives and released to the POTW. The groundwater analytical parameter list required for long-term monitoring was reduced in July 1997. This is being attributed to the removal and stabilization of large source areas during RA. Physical capture of the groundwater beneath the Facility is projected to occur in the year 2005. The PRP's have implemented a long-term operation, maintenance and monitoring program. Institutional deed and land use restriction, including the Facility, the unnamed tributary within confines of the Velsicol property and agricultural lands adjacent to the west boundaries of the Facility are currently being reviewed.

III. RECOMMENDATIONS

I recommend the continued operation and maintenance of the landfill cap, and groundwater collection system, and monitoring well network until cleanup standards are achieved. I recommend that the IEPA retain the technical lead for this site and that IEPA evaluate proposals to further upgrade the landfill slope and/or groundwater collection system if submitted.

IV. STATEMENT OF PROTECTIVENESS

I certify that the remedies selected for this Site remain protective of human health and the environment.

V. NEXT FIVE-YEAR REVIEW

The next five-year review will be completed by July 1, 2001, which is five years from the date of the original review period as outlined in the Consent Order, which is approximately five years from the date on-site construction mobilization occurred at the Site (July 1, 1991).